

**Department of Ecology – Water Quality Program
Development of Low Impact Development (LID) Standards for the
Municipal Stormwater General Permits**

**Technical Advisory Committee Meeting #4, April 15 2010
Federal Way City Hall
MEETING SUMMARY**

Goal of the Meeting: The goal of this meeting was to provide further detail on the permit framework and regulatory approach, discuss the concept of a feasibility checklist to assist in developing content, discuss the recommendations for an approach to LID in flow control exempt areas and touch on basin planning approaches for the municipal permits.

Agenda

Regulatory Approach
Checklist and Feasibility
Flow Control Exempt Areas
Basin Planning
Timing

ATTENDEES

A list of attendees is attached.

MEETING SUMMARY

The meeting summary provided here is a transcription of the flip-chart notes taken by Kate Snider during the meeting and supplemented by staff notes. This does not provide a full documentation of the dialogue, but provides a record of the primary input received from the attendees.

Regulatory Approach

Ecology explanation of table:

- The regulatory approach presented for discussion purposes varies based on location inside the UGA or outside the UGA. Inside the UGA the approach is based on the projects size which is the area disturbed.
- Ecology did some additional modeling to determine that the saturated hydraulic conductivity of 0.1 inches/hour is the point at which it became more difficult to achieve either the annual volume or extended flow duration hydrologic performance standard.
- Outside the UGA the performance standard 'without feasibility review' is based on assumption that on a large lot it is feasible to meet the performance standard.
- In a situation with a performance standard with feasibility review the project would be expected to meet the standard but would have the opportunity to use a checklist to

identify site constraints. The project would still use LID but might not meet the performance standard.

- Checklist would list LID techniques prioritized, with definitions of associated feasibility constraints. The project may choose not to do LID based on site compatibility with site design, but must still meet Minimum Requirement #5.
- For a small site with just a checklist the proponent would indicate which LID BMP will be used, but would not be held to a performance standard. It's possible to prioritize the BMP's.
- All projects meeting the thresholds must still meet Minimum Requirement #6 for water quality treatment and Minimum Requirement #7 for flow control.

Discussion

Question #1: Please provide your feedback on Ecology's proposal as outlined in the table above. Is it appropriate to treat development outside the UGA different from inside the UGA?

Question #2: Is 5 acres a reasonable place at which to draw the line between urban projects that could be regulated by a performance standard and urban projects that have to use the standardized evaluation/checklist approach?

- For parcels greater than 5 acres outside the UGA, there would be no checklist?

Ecology response: Correct.

- Does this mean that rural uses with a single family homeowner rather than a larger developer would be required to get an engineer to build a house? Concern regarding the cost/burden.

Ecology response: Large lots with a single residence can either disperse all the stormwater or they could use pre-designed LID techniques to avoid the need for an engineer. The municipality could have pre-packaged information that says - if you do this you'll be in compliance.

- Concern that there is no standard for the checklist approach. The design isn't required to change to implement LID according to the statement. It's voluntary below 5 acres. This will not satisfy direction from the Pollution Control Hearings Board (PCHB) ruling.
- The checklist is ok for a very small project that creates less than 2000 square feet of impervious surface. This approach puts too many under the checklist. The regulations should instead be a way to push incorporation of LID.
- Suggest use existing thresholds for flow control to apply the performance standard and the checklist for sites smaller than that threshold
- Concern regarding the checklist wording. It should not be an optional checklist. It must require LID where feasible.

- In UGA, clarify that the standard applies to the project area disturbed rather than the size of the lot.
- The IAC should help to define 'feasible.'
- In or out of UGA shouldn't matter because important resources exist in both. The threshold should be the amount of disturbance no matter the lot size. The question is the impact to the resource.
- The Seattle checklist is rigorous. This definition of checklist is less rigorous.
- Ecology: The Seattle approach requires use of a table of LID methods and credits. Through use of the table, the user determines how much credit for flow reduction for each LID method used given the impervious area being created. The credits provided are based on achieving a flow reduction performance standard. If the LID methods used do not mitigate for all of the impervious area (or all but 15% of the impervious area on residential projects), then the user must complete the checklist. The checklist tells the reviewer why the project is not doing more LID, including for costs and competing needs.
- A project size threshold of 5 acres is based more on land use rather than site considerations.
- Concern that the approach says outside of the UGA there is "no feasibility review." The PCHB said "where feasible" based on site considerations not about within vs. without UGA.
- Allow the flexibility for jurisdictions to develop the checklist and use their discretion in applying it. They know what's best suited for their municipality.
- Concern with the Seattle approach and its lack of clear standards. For example, the cost issue is vague, and design considerations such as historic district constraints are barriers. We need to talk about removing those barriers as the PCHB asked.
- The Seattle approach is based on best professional judgment rather than design standards. We need more clarity on what authority the staff has, but prefer a more defined standard.
- Agree that in the rural area the regulatory approach should use the project size and not the parcel size
- A one acre threshold is more appropriate. The 5 acre threshold is too large. The checklist could apply below one acre.
- Should apply performance standard more broadly than what is proposed here, especially where the saturated hydraulic conductivity is >0.1 inches/hour. For those sites performance standard should apply similar to flow control. The model shows that is feasible.
- The performance standard should apply to all projects with more than 5000 square feet of impervious surface creation or 7000 square feet of land disturbance. Look at the feasibility review as less onerous than a variance.
- Checklist seems complicated for the local government and the builder. A feasibility review might be better.

- Why not allow a checklist or a feasibility review? Inside the UGA the applicant could have a choice.
- How is the Seattle model tested? Have projects gone through the checklist process?
Ecology response: No, Seattle has not yet tested it.
- Suggest getting real world local government and developer/builder feedback on Seattle type checklist. Ask them – how would you walk through this? The Phase 2's are not ready for this. The PCHB did not require this for them. Need to explore in more detail how it will work.
- Will Ecology provide a draft checklist at the last meeting in June?
Ecology response: Yes, possibly at the last meeting.
- The checklist is too soft. But a performance standard without off-ramps is too hard. Feasibility still needs to be defined. Seattle has done a good job on engineering feasibility. The performance standard can be high and no one can meet it, or it can be too low. If it's in the middle, then it requires a clear definition of feasibility.
- Inside and outside the UGA is not an appropriate distinction because there are important resources in both areas. The Puget Sound Partnership regulation assistance project looked at density and the type of project. The 5 acre threshold is too large. It needs to come down to about 1 acre. Regarding feasibility, every site must be assessed for LID. If the approach is too absolute, it may cause problems. The checklist is good for sites that don't trigger Minimum Requirements #6 and 7.
- If there is a regulatory conflict regarding competing uses, the local government should try to change the codes to eliminate the conflict.
- There should not be a difference in standards for projects inside versus outside the UGA. The issues are about site feasibility, including competing interests and cost.
- The 5 acre size is consistent with the GMA decision that the minimum size for lots outside of the UGA should be no smaller than 5 acres. However, for feasibility it's artificial whether it is located in or out of the UGA, as the site conditions will dictate.

Checklist and Feasibility

Question #3: *How should local governments address feasibility issues related to competing needs?*

- Distinguish between what is legally mandated under state or federal law and what are related to common public values and community vision
- The "triple bottom line" benefits are economic, environmental, and the public vision.
- Each municipality should address by keeping a broad list of jurisdictional needs. There is a whole range to address and they should have the discretion to define competing needs.
- Regulatory code changes will take time. In the first iteration the local government should have a lot of discretion, and later when they better understand the conflict, they can make changes.

- Concern that the municipality will define its competing needs by saying “we want wide roads, big setbacks, no clustering. Should be limits to their discretion.
- Where there are competing needs allow a more relaxed standard, but there should be compensatory mitigation required somewhere in the watershed to prevent new harm.
- Need to define carefully where to draw the line between the LID requirements and competing needs.
- Start with identifying the conflicts among state and federal laws, identify the mandated requirements and also barriers to remove.
- Agree that mitigation should occur.
- Changing requirements to address many of these competing needs will require comprehensive plan amendments, which is a timing issue.
- Federal Way has a downtown vision of high urban density. Would doing that require green roofs and pervious pavement as well as mitigation?
- The current requirement is for local governments to review codes and prepare for this. Ecology should provide guidance.
- Look to Portland for how to require LID in a dense urban area.
- Some issues like historic preservation may limit LID. But LID streets are not necessarily in conflict with state and federal road standards.
- In areas of concentrated growth they may not be able to meet the performance standard. Maybe after you do as much as you can, but need to do rainwater harvest, the cost becomes a feasibility issue.
- Implementation in Phase 1 should provide good input on barriers for Phase 2s. Should be a lag between the two.
- Competing needs should be left to local officials. Even if they can't do LID, still need to meet Minimum Requirements 6 + 7.

Question 4: *If a project wants to claim cost infeasibility, the SPU approach is to require submission of cost information that will eventually be combined and later evaluated for developing cost feasibility criteria. What do you think of this approach?*

- Cost has to be part of the feasibility evaluation. Because we are unable to quantify what this should be, the developers should submit data on it as in the SPU approach.
- It will take time and is complex to determine. Should be a vehicle to the developer to submit comparison costs with and without LID.
- The current flow control standard does not have an off-ramp for cost. Why would this? If they have to decrease the number of units they are building and have less profit, is that a cost feasibility issue?
- Development costs drive whether a project happens or not. Going from 10 to 8 units may mean the project doesn't get built. Developers will do a feasibility analysis prior to committing to a project.
- If the approach is to collect cost data to evaluate later, then when is later?

- Include the costs of mitigation.
- Many environmental standards are on the books (such as septic requirements) that don't get an off-ramp. They must meet the requirement regardless of cost.
- We think that when the PCHB said 'feasible' it primarily meant technically feasible. Should be consistent in application to other environmental laws.
- There are huge costs to public for infrastructure and resources when local governments fail to regulate to standards.
- The goal is to implement LID, and we need to keep perspective. This is a wholesale change. To be successful it should take small steps and get off the ground more quickly with a moderate approach. The local government can reject the cost explanation if it determines it isn't reasonable.
- If the regulations don't set a cost threshold, then developers will do a cost estimate but there will be no basis for the locals to reject. Without a state threshold, they will always accept the developers conclusion - too many will pass.
- State should set a cost threshold and also specify which costs are eligible to be considered. Otherwise the local governments will struggle with this.
- Costs should be considered in a variance process. The existing flow control standard has one. It should not go beyond this.

Question 5: How significant are concerns regarding long-term maintenance with respect to feasibility? For example, a 25 home subdivision could have 25 or more LID features instead of one central stormwater facility. What implementation mechanisms might address those concerns?

- Long-term maintenance is a significant concern. The guidance and structures are not there for inspections, etc.
- Agree that this is critical, and the local governments need protocols. Typically, there is an easement to reach the facility? How will inspections and easements work in a non-traditional approach?
- This is a very important issue. We can maintain the public roads, but what is the long term responsibility in private development? Need to define maintenance. Is it redevelopment or maintenance to re-pave a road?
- Can also be a property rights issue where access may be difficult. The King County 2004 manual created a number of issues around this. There will be a lot of smaller facilities needing maintenance. It will be a challenge no matter what. But that doesn't mean we don't move forward with requiring LID.
- Agree there are substantial concerns, but there are mechanisms and precedents for managing this – easements and covenants. Bioretention facilities need to be monitored more frequently when first established. The owner or homeowners association can report on the frequency at first, and then less when it is better established.
- Yearly reporting by applicant with a lesser frequency after a while would be a shared responsibility of municipality and user.

- King County required some LID maintenance with access for the county to inspect. We have building and safety inspectors, and this is not much different.
- Agree it's important. Individual parcels can be handled differently. A review for proper functioning at time of sale works, like with septic systems.
- Ecology needs to provide guidance to local governments on this.
- Review at the point of sale is a good idea, as our experience is that homeowners associations are not as reliable as a code violation in getting results.
- The maintenance issue is significant but is not a good reason not to do LID, in terms of feasibility.
- Time of sale is not the best mechanism. The practical reality is that the staff must inspect and this is tied to the permit implementation schedule. Time of sale would mean it would only be inspected on average every 7 years.
- If the requirements are implemented gradually over time, it would allow municipalities to build in maintenance protocols gradually as well.
- The permit has brought a significant stress to local governments over maintenance at all facilities.
- Having 25 rain gardens for homeowners to maintain means that there will be 25 different ways of doing maintenance. The homeowners associations do not like to police residents, so this won't work.
- A better design than 25 individual facilities is to use long linear swales like Seattle at the Sea Streets project. LID facilities in the right of way works better for maintenance. Seattle has various classes of maintenance. For a subdivision there could be a dedicated tract. Pervious pavement requires maintenance every two years.
- In the Puget Sound Partnership local government assistance, all LID facilities are maintained by private owners. The local government has the option to perform maintenance where the owner does not and bill them. The City of Marysville opted for this approach.

Question 6. *In establishing the feasibility checklist approach, should Ecology publish a checklist which:*

- A. *The local government must adopt or develop an equivalent;*
 - B. *The local governments are not required to use, but they must adopt a similar site analysis method; or*
 - C. *Is put forth only as an example, with local governments given complete discretion regarding what to include in their checklist?*
- Ecology could publish a draft early and solicit input. Option A with an engineering feasibility checklist only.
 - Go with whatever is necessary to get performance, along with Ecology guidance.
 - Prefer option B along with the suggestion to solicit input on the draft.

- Prefer option B for adequate control. This will avoid legal problems.
- Option C is not an option and would not achieve compliance. Prefer option A, and solicit input.
- Prefer option A, but strike “equivalent.” There should be just one checklist.
- Not sure if there is a difference between options A and B. Ecology should develop and put out a checklist for review this year so local governments can apply it voluntarily early.

Public Input

- For competing needs, historic areas are limited and ADA is localized. More important is growth management and associated zoning. For example, in some urban centers the GMA essentially requires zero lot line development to meet density requirements. For design, we don’t want to set a standard that requires bioretention in dense urban areas like Pioneer Square. Then we lose the GMA battle. Therefore it makes sense to have different standards within UGA or look at standards for new versus redevelopment more closely. LID can counter GMA and have other environmental and water quality impacts.
- Regarding the SPU Director’s Rule, a 95% volume reduction is behind it. If you get to 95% volume reduction, you don’t have to go beyond. It acknowledges that not all projects can meet this. It works like a variance.
- Cost threshold would be good to have but Seattle has more experience than most and still can’t yet set a number. There isn’t enough information.
- In regard to the comment that we don’t have a cost limitation on flow control, there is a much wider range of costs in implementing LID than in standard engineering techniques for flow control.
- King County has some experience inspecting and currently is inspecting over 700 flow control BMPs per year. Access is a big issue. We must look at whether they are functioning, how they are built. The magnitude of cost to municipalities to inspect LID facilities at a landscape scale is enormous. The permit requires that municipalities ensure that facilities are properly built and maintained.
- We have 20 Months until the next permit. Adding LID to new O&M requirements is significant. The documents to prepare are significant. It’s like going from a full stop to 100 miles per hour in 20 months.
- Agree homeowners associations are not equipped to police residents. Regarding the issue of public and private roads, be careful not to make roads private in order to get out of maintenance. Local governments always have a budget issue, and need the resources to do an adequate job. But homeowners are not equipped or trained to do maintenance.
- A public requirement without public maintenance seems like abdication of responsibility.
- Local governments can’t maintain traditional facilities. Now new LID facilities will be a huge burden.
- Regarding the checklist, it needs to integrate the effectiveness of reduction in pollutant load and flow control. In Portland they do not do pretreatment. Facilities need pollution prevention plan to properly function. There will be a pollution impact if maintenance is

inadequate. Portland requires a 2-year bond before accepting facilities. For green roofs, they give a rebate of the utility fee.

- Consider the difference between an adjustment (doing everything you can but not being able to do it all with LID) versus a variance (where mitigation could be required).
- In Pierce County one tool is to offer a credit back from stormwater utility fees. A Professional Engineer and the owner certify that maintenance and inspections occurred and the county staff performs a spot check.
- Important to clarify exception vs variance. Variance is too loose a term with a specific legal definition. Exception may be another better term. These must be defined and used carefully.
- Legislature has just provided additional funding that should help with Phase 1 and Phase 2 O&M programs.

LID in Areas Exempt from Flow Control

Question 7: *Provide feedback on Ecology's proposed regulatory approach for projects in areas exempt from flow controls.*

- Where are flow control exempt areas?
 - Response: Direct discharges to Puget Sound or large rivers. This would not be a performance standard, but a checklist only.
- Should not reduce LID requirements in flow control exempt areas.
- In flow control exempt areas projects still need to meet Minimum Requirement #6 for pollution control. Should it go beyond that with LID?
- The approach should focus LID where it will provide benefits.
- If less than 5000 square feet of PGIS is created, should LID not apply?
- Where treatment is required, the permits should require LID techniques.
- Agree that for a smaller project, a smaller checklist should apply. The PCHB said use LID where feasible.
- Even where there is no PGIS?
- By reducing the volume of water, it accomplishes source control.
- LID will better protect site hydrology.
- In context, is this reasonable? There are issues of inspections, cost, maintenance. This is not smart implementation. The approach should be methodical for LID. Reasonable for development.
- What are the ancillary benefits of LID?
- Ancillary benefits need to be weighed against significant impact on the developer.
- Require LID in flow control exempt areas if basin planning shows it's important for hydrology

Basin Planning

Question 9: *Current recommendations of scientists are that to protect high quality water resources, the following actions are necessary:*

- a. *Preserve a significant percentage (>50%) of a basin in native vegetation;*
 - b. *Minimize effective impervious area;*
 - c. *Provide high quality riparian zones along creeks and wetlands of all sizes;*
 - d. *Prohibit development on steep or unstable slopes; and*
 - e. *Detention and water quality treatment facilities for any stormwater discharges.*
- Should the permits require local governments with identified high quality water resources to develop a strategy to achieve the above qualities, and subsequent implementation of the strategy through land use planning, ordinance and rule updating?*

Discussion:

- Would be a challenge for jurisdictions 'sharing the basin' where some are permitted, not permitted or Phase I and Phase 2. There is no way to require the same rules for all areas.
- Options C and D are already state mandated under the critical area regulations of the Growth Management Act (GMA).
- Options A and B very difficult practicality to achieve. Since the King County CAO was overturned local governments can't require a set amount of a parcel to be in native vegetation. Also the permittees can only address this through landowners who come in with an application for new or redevelopment or land clearing.
- This is critical element to include in this permit cycle. What's missing to date is looking at the hydrology of the basin as whole to protect it.
- Local governments could target specific basins to be "done" in the permit cycle. Those would be the basins on the urbanizing edge where growth is likely, and that have good habitat remaining. There is enough information in salmon and WRIA plans to help identify these high risk areas. The permits could require that they specifically identify and plan for these basins. They can integrate GMA zoning to show they can meet targets to protect native vegetation, habitat, and water quality.
- Agree that permittees should develop and implement this strategy. They need specific targets. It's not just a paperwork exercise. I'm not sure the example says this, but think there should be specific limits for impervious surfaces. A basin context is better suited to addressing how to allow densely concentrated urban development.
- King County tried and ran afoul of state impact fee issue.
- Challenges are the cost of doing this and the practicality of multi-jurisdictional work. Local governments need funding and have lost staff. May be best to look at the basin scale regarding native vegetation retention so as to avoid the site to site approach that is difficult under GMA.
- Sounds like these elements are an additional layer of the CAO and GMA process rather than the stormwater permit

- Basin planning will take awhile, and if it is linked to LID requirements, it will slow down implementation of LID. Should start off with LID where feasible. You could identify basins where planning could help but not put development standard targets into the permit as requirements.
- Board decision was to implement LID where feasible and it also said even LID at the site and subdivision scale is not enough to protect the resources. It indicated we should ultimately address basin planning.
- PCHB required basin planning for Phase 1, but not Phase 2 municipalities. For Phase 1's, many of the key watersheds involve Phase 2 municipalities. Makes sense to define key watershed areas and begin the basin planning process, but it should not be part of the MS4 permits.
- PCHB is clear that basin planning is necessary. Needs to be phased in, beginning in the next permit. It's essential to do Options A and B. GMA has a direct link to the Clean Water Act objectives.
- Should avoid a patchwork of inconsistent requirements. Local governments don't have the authority to require basin planning actions outside their boundaries, but if this is required through a state permit, it can work.
- Big challenge regarding municipal staffing. Ecology should do a smart rollout similar to the approach to the shoreline master program plans.
- Basin planning for urban areas doesn't make sense because there are no resources left. Watershed-based permits are necessary before this can be part of a permit.
- Unless this is done, especially Options A and B, there's no way we will protect Puget Sound. Makes sense to target the high priority areas, and we need to provide resources. The requirement should be in the permit.
- There is existing work we can build on, and this aligns with the GMA requirement to protect water quality. RCW 36. 70A.070(1).
- In most basins that have both Phase 1 and Phase 2, could start with Phase 1 as the lead with Phase 2's as participants. There has been previous basin planning for retrofits. This is to protect water quality. The funding support is important.
- Basin planning is critical. A local structure to use to pull it together is the Countywide Planning Policies. This could help prioritize the basins, and then use interlocal agreements as in the past for basin scale processes.
- If the permits require basin planning they must be very clear regarding specific outcomes that are required, so elected officials understand what's needed. It needs to be more than just projecting the flow control benefits of LID. It needs to address broader issues.

Timing

Question 10: *Do you agree with the assumptions listed on the process for implementing LID?*

Question 11: *Based on these assumptions, what timeframe do you recommend allowing for the Phase I and Phase II permittees to implement LID requirements?*

- If a comprehensive plan needed then it will require 1 yr for the comprehensive plan amendment and at least 6 months for public process for a code change.
- Will comprehensive plan amendment be necessary?
- Disagree that Comprehensive Plan amend would be needed for most jurisdictions. Most will be broad enough to cover these changes. However, most will have to change implementing regulations (this list and more).
- Many municipalities have to wait until after 2012 to begin. A lot of jurisdictions are already planning but some won't until the permit requires it.
- Six months for public process is too little time even if all the decisions are made, to get through the community advisory process, the planning commission, councils, subcommittees of the councils.
- Suggest 2 years to identify code changes, and 1 year to get them in place.
- Agree that no comprehensive plan amendment is needed. But this is a good list of codes. Based on these, it's a minimum 1 year public process following the identification of the changes.
- Each code will have a separate process. Many will be to remove impediments. Probably 18 months to 2 years for the full process.
- Lesson learned from the PSP project working with Phase 2 communities to adopt new codes indicates that it would take 2-3 months to identify impediments.
- Dismayed that PCHB gave timeframe of 2010 for permit implementation and now we are talking about including it in the permits in 2012. This is a lost opportunity. Our view is that they should use this time now to reopen the conversation about steps. This is 2 years when that could be happening. Maybe this argues for a phased process with incremental steps. For example, put some kind of checklist out earlier and start with the stormwater code. Otherwise much opportunity is lost and it will be 7 years since the ruling before LID implementation begins.
- PSP worked with counties and found it was not a big job of rewriting all the codes, but there were targeted changes within codes. Next year the PSP will develop a guidance document for these code changes, which should help streamline the process. Could separate the requirements to insert a performance standard and checklist – 1 year for Phase I's and 18 months for Phase II's.
- This isn't voluntary LID like the PSP did, but is much more comprehensive.
- PSP work with 36 governments. Many did a comprehensive approach.
- Focus on the stormwater code in near term, say 1 to 2 years. The set a longer-term deadline for the more complex codes. The stormwater codes have just been updated and can be done quickly.
- Easier to add the technical stormwater code and stormwater manual changes with guidance from the state.
- Earlier in this process Ecology heard that the committee wanted to do the code revisions all at once. Is this a change of message?

- FEMA process for floodplain and drainage gives points for LID. There may be an opportunity for coordination. Their timeframe is more aggressive.
- Too early for Phase 2 LID requirements, even in 2012. Consider how to bring it in comfortably. Do Phase 1 first. The PCHB said it was up to Ecology to determine this. Set up a process for Phase II's to identify barriers to LID and they can adopt a voluntary LID program. Next permit term it can be mandatory. This will allow them to learn from Phase 1's. It should be mandatory for the Phase I's.
- These assumptions may be too short. Takes time for the elected officials to understand and support. Some review of barriers to LID is underway in Clark County. We'd want to align any comprehensive plan amendments with the 2014 GMA updates. Timeline of 2 years after the 2012 permits is reasonable.
- Process at local level could be streamlined by clear guidance, requirements, and definitions from the state. The local jurisdictions will struggle with it if there is too much discretion. Put in a requirement and a deadline, but expect that some will drag.
- PSP is undertaking a survey to follow-up on implementation lessons from the 36 jurisdictions it has assisted with LID regulations. Success in adoption varies due to resource constraints and competing priorities, especially since it is currently voluntary.
- It's straightforward to add to stormwater code as tools but if we want to require LID, the subdivision codes must be altered.
- There can be two processes. In the current permits they are identifying barriers. Recommend putting guidance out in 2011, then setting a deadline of 2 years after 2012 for full code change.
- Should add the landscaping and vegetation code to this list.
- Most controversial items will be native vegetation and road requirements - private versus public.
- If phased code changes then feasibility would change as other codes are adopted. Could help define feasibility over time.
- Some will wait until the permit is issued and appeals are resolved. With 10 or 11 codes to amend, elected will be very cautious.
- One package isn't realistic. There is a different staff, different focus. It will have to go to the Council in a piecemeal manner and on different tracks.
- Package comprehensively, then it will break into individual components that move at their own pace.
- No one has staff available to prepare without a requirement. What is standard practice for us is to triage.
- Question: Are there ways to work together to streamline the adoption process?
- Assistance is needed with training and new equipment. Will need guidance on how to implement.
- If the permit just says to change development codes, that is too vague. Ecology should be very specific about code changes, and can build off of the work of the 36 PSP

jurisdictions. The low hanging fruit can be done more quickly. Define this specifically and set a clear and aggressive timeframe.

- Technical knowledge and training is key for public works staff, planning staff, and local engineers. Need competence to have success with LID. We need to provide and emphasize early training to build confidence and expertise.

Public Input

- In areas that are flow control exempt the issue is not just site constraints. Is LID the best technology for pollutant removal? Conventional treatment methods may be better than LID. LID doesn't make pollutants go away. It just puts them in a different place. So, if you have an LID maintenance issue, and if you have a risk to groundwater, then you might have reasons to use non-LID approaches to control pollutants.
- Regarding one code change or many: The most daunting revisions are land use changes like clustering, building heights and these will take significant time. Stormwater and roads are more doable.
- Agree with three years for all changes. Stormwater code could be quicker. An omnibus process for land use codes is a 3 year process.
- Appeals are possible at the state, county, and city levels. Need to have some provision in the permit for non-compliance delays caused by appeals.
- Make it realistic and give us a permit that we can really do. Basin planning should be in a watershed-based permit. The state can't mandate coordination. To do this Phase I and Phase II's must be more equivalent in programs. The watershed level makes sense, and many other objectives could be met within watershed-based permits.
- Agree with an adoption process of 2 years if everyone agrees with all changes, but there will be pushback on more regulations.
- Do not rely on homeowners or homeowners associations for compliance with maintenance. We required self-maintenance, but did quality control inspections. Even for commercial businesses with yearly inspections we get 20% compliance. This will lead to failure in the regional conveyance system and treatment facilities.
- Focus on public LID infrastructure in right of way with enforcement on maintenance. If the swale is in the backyard, we can't inspect if it slopes away from the road.
- How can we achieve basin planning objectives within 'home rule' structure of Washington State? This is a significant barrier. Regarding timing, for some it won't be a reality until the permit is issued, for others when the appeal is done, for others at the deadline.

Next steps:

1. Survey results: A summary of survey response by TAC and IAC members will be provided to all committee members without identifying them by name. Ecology sent it out to identify the gaps, and does not plan to make it public. Committee members agree that it is draft input.
2. May meeting agenda suggestions:

- Look at the gaps based on the survey input.
 - Clearly document points of view.
 - More on the feasibility checklis
3. June meeting:
 - Ecology will provide in advance a detailed outline of its thinking on the permit.
 - Committee members will come with written comments on the outline and will be asked to share the top 3 comments.
 4. Ecology will publish draft preliminary language in the fall for broad comment.
 5. Spring 2011 – formal public review of the permit.

Request that Ecology send out additional information depending on whether the performance standard will be flow duration curve versus volume - how would that affect training.

Additional Ecology Handout at the April 15,2010 Implementation Advisory Committee Meeting

REGULATORY OPTIONS

Performance standard w/o feasibility review

Development sites expected to achieve the adopted performance standard in all cases except as allowed by formal variance.

Performance standard with feasibility review

Development sites are expected to achieve the adopted performance standard unless it is determined to be not feasible because of: 1) engineering & site constraints as identified in a checklist 2) competing/conflicting requirements of local code 3) cost. Development sites are expected to implement LID techniques that are feasible for the site.

Checklist

Development sites are expected to consider all LID techniques in a checklist. Site developers may choose to not implement LID techniques based upon compatibility with site development design preferences. There is no minimum compliance level except for existing M.R. #5 requirements (i.e., roof & driveway dispersion on till soils, roof & driveway infiltration on outwash soils, BMP T5.30 on all sites).

Notes:

Above LID requirements are in addition to meeting Minimum Requirement #6 – Treatment – and Minimum Requirement #7 – Flow Control – wherever they are applicable in accordance with Appendix 1 of the Phase I and II permits.

All Phase I and II municipalities will update local site development codes, rules, and standards to incorporate LID principles. Ecology has not set a minimum expectation for these updates. Therefore, all development sites will have LID features as required by updated code, rules, and standards.

April 15, 2010 IAC Meeting Attendees**IAC Members:**

Jan Hasselman, Earthjustice
Craig Doberstein, Herrera Environmental
Bruce Wishart, People for Puget Sound
Art Castle, Homebuilders Association of Kitsap County
Debby Hyde, Pierce County
Bruce Wulkan, Puget Sound Partnership
Jodi Slavik, BIAW
Doug Peters, WA Dept of Commerce
John Palmer, EPA Region 10
DeeAnn Kirkpatrick, National Marine Fisheries Service
Cathy Beam, City of Redmond
Harry Reinert, King County
Larry Matel, City of Bremerton
Wally Costello, Quadrant Homes
Wayne Carlson, AHBL
Ron Wierenga, Clark County for Al Schauer
Bill Moore, Dept of Ecology
Ed O'Brien, Dept of Ecology

Facilitator:

Kate Snider, Floyd/Snider

Staff:

Tina Gray, Floyd/Snider
Harriet Beale, Dept of Ecology

Public:

Le Nguyen, WSDOT
Sean Darcy, Contech
Theresa Wagner, City of Seattle

Dave LeClerq, City of Seattle

Doug Navetski, King County

Pat Allen, Thurston County

Clayton Stewart, City of Snohomish

Lisa Rozmyn, Port of Tacoma

Paul Fendt, CDM

Paul Eisensteiner

Hollie Shilley, City of Federal Way

Morgan Chan, City of Federal Way

Janet Shill, City of Federal Way

Jennifer Jerabek, MBA

Glen Sims, Puget Soundkeeper Alliance

Annette Griffy, City of Vancouver

Marilyn Guthrie, Port of Seattle

Hans Hunger, Pierce County

Larry Shaffner, WSDOT

Ray Edralin, GHD